

4129

RECORD
COPY

GR

JPRS: 4129

21 October 1960

MAIN FILE

THE TRAINING WITHIN INDUSTRIES PROGRAM IN INDONESIA

DISTRIBUTION STATEMENT A

Approved for Public Release
Distribution Unlimited

RETURN TO MAIN FILE

19991006 016

Reproduced From
Best Available Copy

Photocopies of this report may be purchased from:

PHOTODUPLICATION SERVICE
LIBRARY OF CONGRESS
WASHINGTON 25, D. C.

U. S. JOINT PUBLICATIONS RESEARCH SERVICE
205 EAST 42nd STREET, SUITE 300
NEW YORK 17, N. Y.

THE TRAINING WITHIN INDUSTRIES PROJECT IN INDONESIA

[Following is the translation of an article by Raden Muhadi entitled "Informasi Tentang Pilot Project TWI (Training within industries) Program di Indonesia" (English version above) in Industri, Vol V, No 5-6, Djakarta, May-Jun 1960, pages 14-18]

Foreword: In facing the present period of development, there are strenuously required human forces (manpower) possessing knowledge and skill sufficient to lead in the achievement of the projects which are now faced as duties in all fields of endeavor. Particularly in the field of production, but in services and other respects also, the functionaries to whom execution is entrusted must have a supervisory approach. They must not only be persons possessing in themselves the germs of leadership in its highest form, but must also be foremen, for they possess the same duty, that of supervising and bearing responsibility for the smoothness of effectuation of operations; for the obtaining of the highest efficiency in production as well as the best possible quality.

Accordingly there are requisite here five basic qualifications which must be possessed by the functionaries referred to. The five basic requirements mentioned are:

A. Knowledge concerning

1. The work to be supervised, and
2. The responsibility respecting the product of that work

B. Skill in

1. Leading workers in obtaining the largest and best yield
2. Instructing workers how to do anything exactly
3. Improving work methods by eliminating wasted motion, compiling and rearranging as well as simplifying the the steps which are still necessary.

A. Knowledge -- can be obtained by studying, reading books, etc.

B. Skill -- can only be obtained from practical experience.

1

From this practical experience, there are obtained skilled personnel. It is precisely this which we require in order to be able within the briefest period of time to fulfill the production needs of our society, the total number of which increases with the passing of the days (according to an UNO report, the increase amounts to 1.5 million people annually, more or less). Accordingly, in order to obtain these skilled personnel, the TWI (Training Within Industries) program has been put in action, which has been made a function of the Work Training Office [Djawatan Latihan Kerdja, hereinafter abbreviated DLK] of the Department of Labor (Department Perburuhan).

(1) On page 168 of the book "The Broad Outline for the Five-Year Development Plan, 1956-1960", gotten up by the National Planning Bureau (Biro Perantjang Negara -- hereinafter BPN), there are found basic ideas expressed thus: "... The improvement in productivity within business firms in Indonesia largely depends upon improved leadership and supervision. One effective method of training for the purpose mentioned is what is termed Training Within Industries, or TWI. It is strongly urged that this form of training be instituted promptly, since this form of training demands a relatively short time for the obtaining of satisfactory results. Furthermore it is clear that this training has already been put into effect very widely in other countries, Japan and India included, with very good results."

(2) Continuing on, on p.092 of the volume mentioned above, it is stated that: "... One function which is strongly needed in present-day Indonesia, viewed from the industrial standpoint, is the function of supervision at all levels. In this respect, there must be brought to fruition a very intensive program known as the TWI, with three fundamental sub-programs ..."

(3) Such is the beginning note of the history of TWI in our nation. Thus, if we wish to speak plainly about the history of TWI in Indonesia we cannot get away from the volume of the BPN mentioned.

Now these sub-programs of TWI are:

1. Job Instruction Training (Latihan Instruksi Kerdja -- hereinafter LIK) which means training in how a supervisor imparts instruction or training to his juniors in such fashion that a worker can carry out a job swiftly, precisely, knowledgeably, and safely.

2. Job Relation Training (Latihan Hubungan Kerdja -- hereinafter LHK) which is training in how a supervisor must lead his juniors so that a worker may feel that he is being treated like a human being.

3. Job Methods Training (Latihan Tjara Kerdja -- hereinafter LTK) which is training in how a supervisor can combine all the available personnel with available tools and materials so as to obtain work results which are closer to perfection than previously.

(4) On 24 February, 1956, there was a meeting of the PAKIN (Panitia Kordinasi Interdepartmental -- Interdepartmental Coordination Committee), led by Engineer Djuanda, who at that time held the position of Director of the National Planning Bureau, and this meeting resolved that the TWI program should be instituted in Indonesia and that its leadership should be entrusted to the Ministry of Labor. Since the DLK has the function of and responsibility for the subject of training the work force (lower, intermediate, and upper levels), the Directorship of the Ministry of Labor named the DLK as the agent to carry out the TWI project and to supervise it.

(5) On 8 April, 1958, the Prime Minister of the Karya Cabinet, by this time again Eng. Djuanda, inaugurated the members of the TWI Interdepartmental Committee, consisting of representatives of:

- The Ministry of Labor
- The Ministry of Public Works and Power
- The Ministry of Education, Training, and Culture
- The Ministry of Agriculture
- The Ministry of Navigation
- The Ministry of Industry
- The National Planning Bureau
- The National Bank of Industry
- The (Old) Djakarta Horticultural Center

(6) In order to carry out TWI training for these supervisors, there were first required training personnel, so the DLK established three Instructor-training Institutes for LIK trainers, three Instructor-training Institutes for LHK trainers, and one Instructor-training Institute for LTK trainers, all of them under the leadership of experts from abroad under technical assistance from the ICA, namely 1. Mr. R. B. Richardson, 2. Mr. Cyrus Falconer, and 3. Mr. John H. Greenland.

To the end that Indonesia may not at a later date be dependent any longer on foreign experts in the field of this TWI program, we arranged the formation of one Master Institute for LIK, one Master Institute for LHK, and one Master Institute for LTK, such that all these Master Trainers will have qualifications to train instructors along the respective lines, so that we shall be able to increase the number of trainers at will; in accordance with need.

(7) If we recall the opening day of the Pilot Project of the TWI Program at Pasar Rebo, which opening was formalized by Attorney Samjono, Minister of Labor in the Karya Cabinet, from initiation of the first instructor training along the line of LIK, in the middle of May, 1958 right up to the present date, with the closing of the Master Institute in LTK, this Pilot Project has been in force for two years and a bit over.

(8) Within the compass of these two years of time, we are able to

present as direct results a number of figures, to wit:

	<u>Total Master Trainers</u>	<u>Total of Trainers</u>
Job Instruction Training (LIK)	9	74
Job Relation Training (LHK)	11	75
Job Methods Training (LTK)	7	9

The total number of trainers in LIK and LHK will be seen to be considerable already, since of course they have already been multiplied by our National Master Trainers. And the Master Trainers in LTK who are presently attending classes in this very room may be expected to be able, in three or four months more, to "hatch out" between 40 and 50 new trainers. These seven men consist of: 1 man from the PPN Baru (Pusat Perkebunan Nasional Baru -- New Plantation Center) at Djember, 1 man from the Main Shops of the DKA (Djawatan Kereta Api -- State Railways) at Mangarai, 1 man from the MII (Madjelis Industri Indonesia -- Confederation of Indonesian Industries) and 3 men from the DLK.

Of those who have already become trainers, there are found a number of university people, e. g., an engineer from the Gresik Cement Factory, an engineer from Satya Negara, Ltd., Surabaya, and engineer from Mantrust, Ltd., Bandung, a law graduate from Mantrust, Ltd., Bandung. Besides those, there are also a number of trades union leaders. In North and South Sumatra there are also a number of TWI trainers. And let us further not forget that women's groups have also joined in becoming trainers.

(9) The figures concerning supervisors who have already joined in TWI training are as follows, according to records complete to the end of April 1960:

LIK	1466 persons
LHK	1405 persons
LTK	<u>41</u> persons
Total	2912 persons

If we divide this training according to supervisory level, then:

	<u>Lower</u>	<u>Intermediate</u>	<u>Upper</u>	<u>Totals</u>
LIK	182	1213	71	1466
LHK	240	1075	90	1405
LTK	<u>26</u>	<u>13</u>	<u>2</u>	<u>41</u>
Totals	448	2301	163	2912

By these figures, it is made plain that the group of intermediately-ranking supervisors holds the record for size. Possibly

the "gap" or vacuity which we are experiencing at the present time is in the process of being filled by them.
(10) Of the 2912 total number of supervisors who have been trained, individuals are to be found in 152 firms or offices which embrace the following segments of the economic movement:

1. Communications: GIA (Garuda Indonesian Airways), DKA (Djawatan Kereta Api -- Indonesian State Railways), DAMRI (Djawatan Angkutan Motor Republik Indonesia -- National Trucking Office), PTT (Pos, Telegrap, dan Telepon -- Post, Telegraph, and Telephone Office), PELNI (Pelajaran Nasional Indonesia -- Indonesian National Navigation Lines), Djakarta Lloyd.

2. Arriiculture: PPM, Old and New (National Agricultural Center, Old and New, counting sugar factories, inland fisheries, and forestry.

3. Basic Industries: Petroleum, Cement factories, ship-yards, soda factories, electricity firms, jute mills, paper factories.

4. Intermediate Industries: Tire factories, auto assembly plants and repair shops, iron works, weapons factories, carton factories, glass factories.

5. Consumer Goods: Textiles, battery factories, batik firms, ice factories, kitchenware factories, salt works, cigarette and cigar factories.

6. Banking: The National Industrial Bank, the Indonesian National Bank, the Indonesian Banking Corporation.

7. Other: Radio assembling plant, publishing houses, pharmaceutical factories, ceramics firms, the Institute for the Rehabilitation of the Maimed, storage firms, and various governmental services.

The most active in carrying out TWI training programs, if we wish to rank them numerically, are:

#1, Garuda Indonesian Airways, with 153 LIK and 142 LHK

#2, New National Plantation Center Djember, with 104 LIK and 101 LHK

#3, The "Djantra" Spinning Mill LIK 71 and LHK 75

#4, Tandjung Priok Ship Repair Works, with LIK 67 and LHK 29.

- 1 -

If we refer further to the previous documents of the National Planning Bureau, which has carried out research with the technical aid of Dr. MacVoy concerning the need for TWI training, it becomes clear that all the fields of enterprise listed in the results of this research have joined in bringing TWI to fruition within these two years. We proceed now to present various opinions from management concerning TWI:

1. Director of the Kedaton Rubber Plantation, Djember: "Before the employment of LIK, the yield of our young trees was 3 kg. dry rubber per day; now they are able to produce 4 kg. This is an increase of 33.33% in production, and the quality of our sheets as also improved so that 90% reach the standard for Ribbed Smoked Sheets I. Prior to institution of LIK, only 78% reached it."

2. Director of the Klaten Rubber and Coffee Plantation, Djember: "The yields manifested from LIK are, among other things: Our new tapping labor can compete with tappers with years of experience, particularly on the theoretical side. This is even more so in the case of "standbys", who are usually employed to fill vacancies. The yield per tapper per day from trained tappers exceeds that of tappers who have had years of experience."

3. Director of the Anim Sand Rubber and Coffee Plantation #5-6, Djember: "LIK is something we have spread throughout our foremen and the results have appeared in: less frequent damage to trees in tapping, greater proportion of coffee plants surviving planting; in the factory, wastage has been decreased, most particularly in the use of formic acid and oil, whereas the quality of production is increasingly good."

4. Commandant of BIPAL "B" (the meaning of this abbreviation cannot be located), Managgarai (Djakarta) of the Materiel Directorate, Indonesian Army: "For our part the most important result has been a little understanding for them that every supervisor must train himself in arriving at the conditions requisite for a job supervisor, and LIK is an adjunct to them the significance of which is not at all small."

5. Director of the Army Materiel Works at Bandung: "There is clearly an advantage in the results of training. Particularly through employment of the results of that training, the production obtained may rise above that obtained prior to institution of the training mentioned. We believe that the advantage will increase with respect to our production. We hope that other supervisors will be afforded the opportunity of obtaining this kind of training."

6. Director of the INTRIRUB Tire Factory, Djakarta: "We see a very great advantage arising from the training referred to,"

viewed as a whole, toward the end of increasing the efficiency of the workman. This holds true with respect to supervisory personnel in general, and particularly for our supervisors, all of whom are junior men, still requiring a great deal of experience and guidance to become leaders. One thing which we might mention here is that productivity per man hour in our firm has clearly and steadily increased, even though our workmen at the time of starting work with us are unskilled personnel and, in problems of producing auto tires, "illiterate". Perhaps we may regard this circumstance as being in part a result of the LHK which has been given to our supervisors."

7. Director of the Tandjung Priok Dry Dock Company: "Concerning the LHK program we may express an appreciation of its great usefulness, because whenever our supervisory personnel encountered problems with their workers before they had been given the LHK referred to, they tended to be somewhat heavy-handed in the measures they took or their manner of handling the situation, but after obtaining LHK with its employment of the bases of good relations, the situation is different. In resolving every problem, there has been reached a mutuality of understanding such as to give rise to good relations between labor and its supervisors."

8. Manager of the "Tasik Madu" ("Honey Lake") sugar factory, Solo: "Training in the technique of Job Relation and Job Instruction is of considerable usefulness and very timely, because every supervisory functionary must possess a 'way out', in order to reach any decision accurately as well as a work system which is satisfactory. Particularly is this so in a period of development such as the present, after we have experienced epochs of revolution and of reconversion."

9. Director of the "Djantra" Spinning Mill Works, Semarang: "The clear-cut profits which we can obtain from this TWI are: facilitation of supervision over workers in the sections because of the existence of an homogeneous work-system; speeding the breaking-in time of new men because of the existence of a work organization which has already been laid out in efficient fashion, so that wrong or waster motions can be eliminated; the obtaining of latitude in transferring supervisors periodically from one duty to another whenever circumstances demand."

10. Further steps which we shall commence in the second semester of this year comprise among them: 1. Follow-up with respect to firms which have already carried out TWI; 2. Increasing the total of TWI trainers; 3. Transferring our attention more to TWI activity outside the island of Java; 4. Protecting the quality of trainers by a procedure of establishing quality re-checks; 5. Moving toward a closer coordination with all

groups; 6. Beginning to get together a Standard of Work Performance or Standard of Operational Procedure so that this standard may in the near future become a national standard.

Concrete Results of the TWI Pilot Project

May 1958 to May 1960

<u>Number</u>	<u>Area of Origin</u>	<u>Master Trainers</u>			<u>Trainers</u>		
1	Greater Djakarta	6	7	6	28	30	4
2	West Java	3	2	-	14	23	1
3	Mid-Java	-	1	-	14	10	3
4	East Java	-	1	1	11	11	-
5	South Sumatra	-	-	-	7	-	-
6	North Sumatra	-	-	-	-	1	-
Totals		9	11	7	74	75	9
		LIK	LHK	LTK	LIK	LHK	LTK

Supervisor Training

Total No.

<u>Number</u>	<u>Area of Origin</u>	<u>of Offices</u>	<u>LIK</u>	<u>LHK</u>	<u>LTK</u>	<u>Totals</u>
1	Greater Djakarta		47	645	9	1,289
2	West Java		26	229	22	450
3	Mid-Java		55	363	10	714
4	East Java		24	229	-	469
Totals			152	1,466	41	2,912

Level of Supervisors

<u>Number</u>	<u>Course</u>	<u>Lower</u>	<u>Intermediate</u>	<u>Upper</u>	<u>Total</u>
1	LIK	182	1213	71	1,46
2	LHK	240	1075	90	1,40
3	LTK	26	13	2	4
Totals		448	2,301	163	2,91